

## ABSTRACT OF THE DISCLOSURE

A process is provided for the removal of organic substances (TOC), pesticides or other specific compounds from an aqueous salt solution, for example from a regenerate derived from water purification. The TOC-containing aqueous salt solution is treated in a desalination membrane according to the dead-end principle, wherein neither longitudinal flow over the membrane with air and/or water, nor continuous concentrate discharge takes place, after which the obtained permeate is reused, and the concentrate obtained after flushing is discharged. The TOC-containing aqueous salt solution is introduced at the feed side of the membrane module at a flux of 5-75  $1/m^2 \cdot h$ , a feed pressure of 4-12 bars for 30-40 minutes, while the obtained TOC-depleted permeate is discharged. Preferably, operation takes place at a flux of 15-25  $1/m^2 \cdot hr$ , a pressure of approximately 8 bars, and the duration of treatment is approximately 30 minutes. The membrane used is tubular, capillary, hollow fiber or helically wound, and is usually of the nanofiltration or reverse osmosis type.